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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/734,490

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Mark Zdeblick

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EXAMINER

NASSER, ROBERT L

ART UNIT

PAPER NUMBER

3735

MAIL DATE

DELIVERY MODE

10/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/734,490	Applicant(s) ZDEBLICK ET AL.	
	Examiner ROBERT L. NASSER	Art Unit 3735	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 48-50,52,58-68 and 96-113 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11,48-50,52,58-68 and 96-113 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Claims 58 and 61 are objected to as being duplicates of each other.

Claims 62 and 63 are objected to in that there is no antecedent basis for the at least one effector, as the basis is for at least two effectors.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 48, 49, 52, 58-62, and 96, 97, 101-108 and 112-113 are rejected under 35 U.S.C. 102(b) as being anticipated by Hrdlicka et al 6038480. With respect to figure 4, Hrdlicka shows a body having 2 effectors (R1 and C1) each having a separately addressable processor, where the effectors are axially spaced along the length of the body. The system includes at least one common conductor (ID2, which is an extension of ID1). Claims 49 and 102 are rejected in that the term “cardiac pacing lead” is an intended use limitation and is met if the reference is capable of the use. Hrdlicka is a stimulation system and is capable of cardiac pacing. Claim 52 is rejected in that Hrdlicka is an implantable lead. Claims 58-61 are rejected in that C1 has stimulating electrodes and R1 (with processor C2) has sensing electrodes. However, electrodes are both sensors and stimulators. Hence, the claim language is met. Claim 62 is rejected in that the effector is coupled to a conductor P1, P2, etc. Claim 96 is rejected in that based on the uses described in columns 7 and 8, the device of Hrdlicka is sized

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to be able to be introduced through and to a blood vessel. Claim 97 is rejected in that the processors C1 and C2 comprise chips. Claim 101 is rejected in that the processor C2 receives data from data source C1, which is processed. Claim 103 is rejected in that each effector includes at least 4 electrodes. Claim 104 is rejected in that the processor C2 must have a power connector connected to P1 and P2. Hence, there are two common connectors. Claims 105-108 and 112-113 are rejected for the reasons given above.

Claims 48, 49, 52, 58-62, 66-68, 96, 97, 101, 102, 104-107, and 112 are rejected under 35 U.S.C. 102(b) as being anticipated by Schallhorn et al 6473653. With reference to figure 14, Schallhorn has a catheter with a plurality of effectors on the tip, each having at least one electrode and a processor, with a plurality of conductors extending through the lumen of the device. The power and ground are common conductors. Claims 49 and 102 are rejected in that the term "cardiac pacing lead" is an intended use limitation and is met if the reference is capable of the use. Schallhorn's figure 14 shows a stimulation system and that is capable of cardiac pacing. Claim 52 is rejected in that Schallhorn is an implantable lead. Claims 58-61 are rejected in that electrodes are both sensors and stimulators. Hence, the claim language is met. Claim 62 is rejected in that the effector is coupled to a conductor P1, P2, etc. With respect to claims 66-68, the conductors extend through the catheter lumen. Hence, there must be penetration of the catheter surface to connect to the electrodes and processor. Claim 96 is rejected in that based on the uses described in columns 7 and 8, the device of Schallhorn is sized to be able to be introduced through and to a blood vessel. Claim 97

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is rejected in that the processors comprise chips. Claim 101 is rejected in that the processor receives data from data source which is processed. Claim 104 is rejected in that the processor C2 must have a power connector connected to P1 and P2. Hence, there are two common connectors. Claim 112 is rejected for the reasons given above.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 50, 63, 98-100 and 109-111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hrdlicka et al. Claim 50 is rejected in that there are multiple conductors extending outwardly through the body from the effector, presumably through a cable. However, there is only one lumen in the body. Applicant has not stated that having a separate lumen for each conductor solves a stated problem or is for a particular purpose. Therefore, it is the examiner's position that the number of lumens would have been a mere matter of design choice for one skilled in the art. Claim 63 is rejected for essentially the same reasons given above. Claims 98-100 and 109-111 are rejected in that Hrdlicka states that the processor C2 filters or otherwise processes the signals (column 4, lines 35+). The examiner notes that in today's age, most processing is done digitally. Hence, it would have been obvious to include an a/d converter in the chip.

Claims 50, and 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schallhorn et al. Claim 50 is rejected in that there are multiple conductors extending outwardly through the body from the effector, presumably through a cable. However, there is only one lumen in the body. Applicant has not stated that having a separate lumen for each conductor solves a stated problem or is for a particular purpose. Therefore, it is the examiner's position that the number of lumens would have been a mere matter of design choice for one skilled in the art. Claim 63 is rejected for essentially the same reasons given above. Claim 64 is rejected in that there is a common ground, power, and data conductor.

Claims 50, and 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schallhorn et al in view of Sackett 5313020. In column 1, Sackett teaches that it is well known to isolate co-linear conductors by encapsulating the conductors with a dielectric, so as to prevent interference. Hence, it would have been obvious to fill the lumen of the device of figure 14, to improve the signal to noise ratio. As such, part of the circuitry for the effector would be encapsulated.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT L. NASSER whose telephone number is (571)272-4731. The examiner can normally be reached on m-f 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor II can be reached on 571 272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert L. Nasser Jr/

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Primary Examiner
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RLN
October 27, 2008